

ABSTRACT OF THE DISCLOSURE

A magnetic resonance imaging apparatus comprises an RF coil unit which generates RF pulses toward a subject, and which receives an MR signal from the subject, gradient magnetic field coils which generate a gradient magnetic field for slice selection, a gradient magnetic field for phase encoding and a gradient magnetic field for frequency encoding, respectively, an arithmetic unit which generates image data on the basis of the MR signal, and a sequence controller which controls the second gradient magnetic field coils in order to generate flow pulses for dephasing or rephasing a spin of a blood flow within the subject, in the same direction as that of the phase encoding gradient magnetic field.